1. Record Nr. UNISA996465341403316

Autore	Abidi Ali Imam
Titolo	Deformable Registration Techniques for Thoracic CT Images [[electronic resource]] : An Insight into Medical Image Registration / / by Ali Imam Abidi, S.K. Singh
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-10-5837-7
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (138 pages)
Disciplina	006.6
Soggetti	Optical data processing Pattern recognition Radiology Bioinformatics Computational biology Health informatics Computer graphics Image Processing and Computer Vision Pattern Recognition Imaging / Radiology Computer Appl. in Life Sciences Health Informatics Computer Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Theoretical Background -- Chapter 3. A Moving Least Square Based Framework for Thoracic CT Image Registration -- Chapter 4. A Path Tracing and Deformity Estimation Methodology for Registration of Thoracic CT Image Sequences -- Chapter 5. Deformable Thoracic CT Images Sequence Registration using Strain Energy Minimization -- Chapter 6. Conclusion & Future Work.
Sommario/riassunto	This book focuses on novel approaches for thoracic computed tomography (CT) image registration and determination of respiratory

motion models in a range of patient scenarios. It discusses the use of image registration processes to remove the inconsistencies between medical images acquired using different devices. In the context of comparative research and medical analysis, these methods are of immense value in image registration procedures, not just for thoracic CT images, but for all types of medical images in multiple modalities, and also in establishing a mean respiration motion model. Combined with advanced techniques, the methods proposed have the potential to advance the field of computer vision and help improve existing methods. The book is a valuable resource for those in the scientific community involved in modeling respiratory motion for a large number of people. .